



Published in final edited form as:

Child Sch. 2012 ; 34(2): 92–102. doi:10.1093/cs/cds016.

Urban Students' Perceptions of the School Environment's Influence on School Violence

S Lindstrom Johnson, PhD,

Post-Doctoral Fellow, Department of Pediatrics, Johns Hopkins School of Medicine, Baltimore, MD 21287, (410) 614-1081, (410) 502-5440 (fax)

JG Burke, PhD, and

Assistant Professor, Department of Behavioral and Community Health Sciences, University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA 15261, (412) 624-3610, (412) 624-5510 (fax)

AC Gielen, ScD

Professor, Department of Health, Behavior and Society, Johns Hopkins School of Public Health, Baltimore, MD 21287, (410) 955-2397, (410) 614-2797 (fax)

S Lindstrom Johnson: slj@jhmi.edu; JG Burke: jgburke@pitt.edu; AC Gielen: agielen@jhsph.edu

Abstract

This article provides information about the aspects of the school environment students perceive influence the occurrence of school violence. Concept mapping, a mixed methods methodology, was used with two groups of urban, primarily African American high school students (n=27) to create conceptual frameworks of their understanding of the school social and physical environment's influence on school violence. Each group of students identified over 50 different ways they perceived their school environment contributed to school violence. These ideas were categorized into six main topics: Student Behaviors, Norms of Behavior, Relationships with School Staff, Learning Environment, School Safety, and Neighborhood Environment. Students' perceptions supported the current conceptualization of the role of the school environment in school violence. However, this study supplements the current literature by identifying school level aspects of the social and physical environment that contribute to students perceptions of the safety of their school. At this level, differences were seen between the two school environments, indicating a need for intervention tailoring.

Keywords

violence prevention; school environment; African American; high school; concept mapping

Urban Students' Perceptions of the School Environment's Influence on School Violence

Due to the increasing recognition of the consequences of school violence (Centers for Disease Control and Prevention, 2008; Flannery, Wester, & Singer, 2004; Janosz et al., 2008) schools are taking steps to reduce school violence. Currently over 90% of school districts provide funding for the implementation of policies and programs to prevent school violence (Everett Jones, Fisher, Greene, Hertz, & Pritzel, 2007). Most prevention efforts focus on changing individuals' behaviors by mandating punishments for certain behaviors (zero tolerance rules) or by instituting conflict management skills curriculums (Everett Jones et al., 2007; United States Department of Education, 2001). However, for some schools and students current efforts to reduce school violence may not be enough. Urban schools, as well as schools with a larger minority population and a higher percentage of students receiving free and reduced lunch (a marker for poverty) are more likely to have problems with violence (Dinkes, Kemp, & Baum, 2009; Neiman & DeVoe, 2009).

These findings support a more complex understanding of the causes of school violence. Recent scholarly writing encourages a shift from an individually-focused approach to an ecological approach to preventing school violence (Culley, Conkling, Emshoff, Blakely, & Gorman, 2006; Henry, 2009). An ecological approach acknowledges the role of the individual, but also acknowledges the role that family, peers, the school environment, and the school community have in determining the occurrence of school violence. This article will focus on the role of one ecological level, the school environment, in the occurrence of school violence. Additionally, this article will present information from students, an underrepresented voice in the literature about school violence.

The Influence of the School Environment

The school environment consists of both the social and physical environment. Two theoretical frameworks have been explored in the literature linking the school social environment to school violence. The first operates at the school level and emphasizes the importance of social cohesion and social capital, which provide the ability for common social norms and collective action (Sabol, Coulton, & Dorbin, 2004; Sampson, Raudenbush, & Earls, 1997). Studies have measured this by analyzing academic values and positive social interactions in the classroom as well as school management policies and procedures (Sprott, 2004; Welsh, 2003). The second mechanism by which the school social environment impacts behavior is by influencing the likelihood that an individual will conform with social norms (Ford, 2009; Hirschi, 1969). This conformity is commonly measured in the literature as feelings of belonging, teacher support, belief in the fairness of the rules, and involvement in school activities (McNeely & Falci, 2004; Sprott, 2004; Welsh, 2003).

Less exploration has been done on the role that the physical environment plays in encouraging or discouraging school violence. Studies have shown that areas that are considered unowned and, therefore, not defended by individuals are more likely to be the site of violence (Astor, Meyer, & Behre, 1999). Other studies have noted that physical indicators of social control, such as the presence of school police and the lack of physical

deterioration, decrease the belief that violence is acceptable and will go unnoticed (Van Dorn, 2004; Wilcox, Augustine, & Clayton, 2006).

Perceptions of Students

Studies asking youth about the role of the environment in neighborhood violence have shown that capturing youths' perspective can improve conceptual density and ensure validity. For example, in qualitative work with youth, police harassment has been identified as a source of community violence (Fine et al., 2003; Sheehan, Kim, & Galvin, 2004). In a similar fashion, this research may identify new components of the school environment that influence school violence. Additionally, as the influence of an environment on behavior operates through individual perceptions (Bandura, 1977) identifying which aspects of the school environment students perceive as indications of school safety has the potential to improve the effectiveness of school violence prevention interventions.

This article uses concept mapping, a mixed-methods methodology that uses qualitative data generation techniques and quantitative data analysis techniques to create a conceptual framework of urban students' perceptions of the role of the school environment in school violence (Kane & Trochim, 2007). This article: 1) identifies how urban students perceive the school environment's contribution to violence, 2) examines the similarities and differences in this perception between students at two urban schools, and 3) explores in depth some of the main topics identified by students.

Method

Participants

This study was approved by the Johns Hopkins Committee for Human Research. Concept mapping sessions were conducted in May 2008. Two after-school organizations (referred to in this article as Group A and Group B) with large student populations and broad based missions to improve the academic and personal abilities of students were selected to participate as recruitment and data collection sites. The after-school organizations were located in public high schools in an urban school system. Each school's population was over 90% African American with greater than 60% of the student body eligible for free or reduced lunch.

All English-speaking students who participated in the after-school organizations were eligible for the study. At a recruitment session general information about the project was presented and parental permission forms distributed to interested students. Students who returned their signed parental permission forms and were interested in participating then completed assent forms during the first session. Students were given \$10 at the conclusion of each session for their time and contributions. Each session was facilitated by a member of the research team (SLJ) and a research assistant and was audio-recorded. Sessions lasted approximately 90 minutes.

Of the 45 parental permission forms distributed, 27 students returned their forms and gave their assent to participate. In total, 12 students formed Group A and 15 students formed Group B. All but 7 participants were present in all 3 sessions, with others self-reporting

session absence due to school absence or a prior engagement (i.e. job interview or graduation activities). Table 1 presents the sample characteristics.

Concept Mapping Methodology

Session 1. Statement Generation—In the first session, participants were asked to “generate a list of items that describe characteristics of your school environment that could relate in any way, good or bad, to a student's experience of violence.” This prompt is similar to those used in other concept mapping projects attempting to understand contextual influences (Burke, O'Campo, & Peak, 2006). Qualitative methods were used to compile responses to the prompt. A small number of statements were added to each groups' list of statements by the researchers. These statements represent broad concepts previously identified through a systematic review of the literature (Lindstrom Johnson, 2009). The adding of statements is consistent with previous applications of concept mapping (Burke, O'Campo, & Peak, 2006; A. V. Reis, Voorhees, Gittelsohn, Roche, & Astone, 2008). All researcher added statements are indicated in Table 2 with an asterisk. In this first session participants also completed a demographic survey (see Table 1).

Session 2. Sorting and Rating—In the second session each participant was given a set of cards on which all of the previously generated statements were written. They were asked to individually sort the statements into piles according to their opinion of the statements' similarity. Participants were instructed that all statements could not be put into one pile and that all piles must include a minimum of two statements. Participants were also asked to name each of their piles to provide a general sense of the pile's unifying factor.

Data Analysis—Before the third session, each participant's sort information was input into Concept Systems, a licensed software that facilitates the concept mapping process (Kane & Trochim, 2007). This software combines all participants' sort information into a similarity matrix by tallying the number of times two items are sorted together. Multidimensional scaling is then used to transform the similarity matrix into a distance matrix, which can be plotted on an x-y coordinate system (Kruskal & Wish, 1976). Items more closely related are represented as closer in space on the map. This step converts the sorted qualitative data into a quantitative two dimensional point map.

Session 3. Representation and Interpretation—In the third session participants were first shown the results of the multidimensional scaling (the two dimensional point map). Participants were then shown how points on the map (which correspond to statements) could be grouped together using cluster analysis, a statistical tool that groups items based on similar characteristics, in this case distance (Aldenderfer & Blashfield, 1976). Participants were shown multiple cluster solutions and through group discussion chose the number of clusters that they felt best captured their perception of the school environment's influence on violence. They were also asked to give a name to each of the clusters.

Each group of after-school students created their own concept map, which allowed for a comparison of how students perceive the school environment to influence violence in two different urban school settings. To facilitate comparison, a conceptual content analysis was

performed on all clusters and their items. A member of the research team (SLJ) created tables that attempted to match ideas both at the statement and cluster level for the two groups. This is a common method for assessing similarity in concept maps (Burke et al., 2006). Based on this assessment, broader “topic areas” were created and clusters from both groups were placed in these topic areas.

Results

Statements Generated

All statements generated in response to the prompt for both Group A and Group B can be seen in Table 2. In this table each statement has been given a number to help with identification (found in parenthesis after the statement). Group A generated 77 statements and Group B generated 55 statements describing ways that their school environment contributed to school violence. In total, the statements reflected eight clusters for each group, and based on the content analysis, the statements and clusters covered six topic areas (described below).

Participants identified factors of the school social and physical environment that contributed to the likelihood of school violence. For example “peer-pressure to be bad” (Group B Statement 48) and “teachers making sure students are safe” (Group A Statement 17) refer to the social environment where as “gang graffiti” (Group A Statement 29) and “lack of supervision in certain places” (Group B Statement 23) refer to the physical environment.

Clusters Generated

Both groups choose an eight cluster solution as providing the most interpretable grouping of their data (see Figure 1). The statements in Table 1 can be linked using the statement number to the points in Figure 1. For example for Group A the cluster *Bullying* included the following statements: older kids thinking younger kids are vulnerable (40), students misbehaving in class (51), crowds able to form in hallways and cafeteria (47), areas where students can get away with violence (20), peer-pressure to act violently (64), crowds actively encouraging people to fight (46), betting on fights (44), crowds forming around fights (45), and discrimination (57).

Comparison of the Two Schools

The content analysis of both groups' maps identified six common topics. These included *Student Behaviors*, *Norms of Behavior*, *Relationships with School Staff*, *Learning Environment*, *School Safety*, and *Neighborhood Environment*. Clusters are differently shaded in Figure 1 by topic area. Table 2 also presents clusters and statements by topic area. For example, the clusters Violence All Over and Relationships for Group A and the cluster Students' Conduct for Group B are grouped together in the topic *Student Behaviors*.

In the *Student Behaviors* topic, students perceived both relationship difficulties as well as student misbehaviors to be important in the occurrence of school violence. Also included were the presence of gangs and the influence of these gangs on student behaviors. The *Student Behaviors* topic was closely associated with the *Norms of Behavior* topic. This can

be seen by both the proximity of the clusters associated with each of the topics (Figure 1) as well as the overlap in statement content (Table 2). The *Norms of Behavior* topic included peer pressure to be violent as well as crowds forming around fights. Group A also included factors of the school's expectation for behavior, such as principals disciplining students who are in fights (12) and teachers who follow the rules differently (25).

Participants also perceived that their *Relationships with School Staff* were related to the occurrence of school violence. Participants identified both a nurturing role, for example caring about watching students grow and graduate (Group B Statement 32), as well as a monitoring role, for example teachers making sure students are safe (Group A Statement 17). Another topic that appears is the *Learning Environment*. This topic included the clusters labeled Important Activities and School Pride. The contents of these clusters primarily consisted of the statements added by the researcher.

In the *School Safety* topic statements related to school security efforts such as school police and security cameras. It also included statements that address relationship issues with school security and administrators. Group A mentioned school police that are aware and care about students (23, 10) while Group B mentioned a lack of trust by school police (46) and unnecessarily harsh behavior (28).

The last topic perceived as important by both groups was the *Neighborhood Environment*. For Group A, the Neighborhood Environment appears to impact violence through its influence on individual behaviors, norms, and the climate of the school. For Group B, the neighborhood environment is a direct source of school violence as students perceive the neighborhood as a hostile environment and one in which they are not welcome.

The contents of one cluster were not found in both groups. Group B identified a cluster labeled School Issues. This cluster included the items multiple schools in the same building (2), areas where students can get away with violence (3), people judging your school by the other schools in your building (3), and jealousy from other schools (15).

Discussion

This research demonstrates that urban students do perceive a role for the school environment in the occurrence of school violence. In both schools, six common topics through which the school environment influences violence could be identified: *Student Behaviors*, *Norms of Behavior*, *Relationships with School Staff*, *Learning Environment*, *School Safety*, and *Neighborhood Environment*. These groupings mimic the categories used by Osher and colleagues (2004) to identify schools in trouble (student behavior, faculty/staff behavior, physical environment, and school policy). Additionally, they demonstrate that current research and intervention efforts match urban students' own experiences of their school environment and its relationship with school violence (Khourry-Kassabri et al., 2007; Sprott, 2004; Wilcox et al., 2006). However, more similarity was seen at the topic level than at the statement level between the two groups of participants. This implies that while common factors of the school environment may influence school violence, school environment interventions will have to incorporate the specific situation of the school.

In evaluating students' perceptions of the school social environment's contribution to violence, more support was found for the theories of social cohesion and social capital (Sabol et al., 2004; Sampson et al., 1997), than for the theory of social control (Ford, 2009; Hirschi, 1969). Participants' statements focused more on the norms of behavior in school and the ability of school personnel to enforce those norms, than on students' own connections with the school environment. This may have been an artifact of the question, which asked students about their perceptions of an environment and not their feelings towards this environment. The exception to this finding was students' statements about the importance of their relationship with school staff.

Students in this study echoed research findings that have shown the importance of a caring and supporting relationship with their teacher (McNeely & Falci, 2004; J. Reis, Trockel, & Mulhall, 2007). However, the importance of this same relationship with school police is not usually discussed. Students used similar terms to speak of their desired relationship with school police as was found in describing teacher/student relationships (Group A Statements 10, 11, 23 and Group B Statements 45, 46, 47). While there are numerous discussions about the appropriateness and effectiveness of school police in educational settings (Brown, 2006), this study highlights the need for interventions that support a positive relationship between students and school police.

The physical environment of the school was also identified by urban students as playing a role in school violence. This is especially interesting as less research has investigated the contribution of the school physical environment in violence prevention (Wilcox et al., 2006). Work exploring the connection between the physical environment and violence is usually termed Crime Prevention Through Environmental Design (CPTED), and has mainly been the domain of urban planners and criminologists focusing on creating safer communities (Cozens, 2007). Recognizing the potential for CPTED to reduce school violence, the Centers for Disease Control and Prevention are undertaking research that will result in an assessment schools can use to understand how their grounds, buildings, and interiors might contribute to school violence (Centers for Disease Control and Prevention, 2009).

An additional important perception provided by urban students was that they did not differentiate between violence that occurred in the community and violence that occurred at school (Group A Cluster Frightful Environment Group B Cluster Community Problems). This bi-directional flow of violence between the school and the community has been described previously in the literature by New York City students (Mateu-Gelabert & Lune, 2001). Unfortunately, it seems that violence prevention activities tend to operate in silos, with the school only focusing on violence that happens in the school. This finding further emphasizes the need for an ecological approach to both understanding and intervening in school violence.

Limitations and Strengths

While the large majority of statements as well as the analysis process were student generated, a small number of statements were added by the researchers. This is consistent with other studies of concept mapping (Burke, O'Campo, & Peak, 2006; A. V. Reis, Voorhees, Gittelsohn, Roche, & Astone, 2008). As students did not identify positive aspects

of the learning environment in their brainstorming session, ideas that are highly prevalent in the school violence literature, these ideas were added by researchers (Lindstrom Johnson, 2009). Students recognized these ideas as being related and grouped them together in the *Learning Environment* topic. More research addressing the hypothesized role of these factors and the school environment is needed. It could be that the presence of these factors is related to improvement in other topics or that the learning environment is something that impacts violence in ways not perceived by students.

Similar to other qualitative studies, these findings are limited in their generalizability. The students were recruited from an after-school sample, and while each school's and the district's grade distributions are not known, the grades reported in our sample seem high. This could be a reflection of self-report bias or could represent a substantive difference between our sample and the school populations. However, participants' victimization and participation in school violence were reflective of the city's average on the Youth Risk Surveillance Survey indicating that participants did have similar exposure to school violence (Centers for Disease Control and Prevention, 2008). There were also differences between the two after-school samples in their age and grade distributions. These differences might explain the statement level differences between the two school environments. This study only included two school environments which are located in a large urban school district with a high prevalence of school violence and may not reflect other school environments located in rural or suburban areas or schools with lower levels of violence (Centers for Disease Control and Prevention, 2008). Additionally, this study only included high school students; the effects of school environment on school violence may differ for elementary and middle school students.

While the above sampling could be considered a limitation, it was also a strength as the results were provided to school staff enabling them to use this research to improve their school environment. This information came from students whose schools historically have suffered the highest rates of violence (urban, poor, minority) (Dinkes et al., 2009). Additionally, students have rarely been asked for their opinions about potential solutions for violence and were eager to talk about the subject. The use of concept mapping, which is frequently used in education, provided students with a familiar way to express their understanding. The activities were hands-on and students were able to participate not just in the generation of information but in the analysis of this information.

Implications for Practice and Research

A recent study found that school officials believe that modifying the school environment is the least useful violence prevention strategy (Time & Payne, 2008). This article makes an important contribution as it shows that students, those most experienced with the violence that occurs in schools, see a role for the school environment in the prevention of school violence. Additionally, the fact that many of the ideas generated by the participants' echo those found in literature creates further confidence in the validity of these factors' relationship with school violence. Currently most school districts have students and staff complete a School Climate Survey. The information from this study could be used to ensure that items on the survey are capturing the import factors of the environment that contribute

to students' perceptions of safety. It could also be used to inform a more detailed proactive assessment of the school environment by school personnel.

Researchers could use the information from this study to assist with the design of interventions attempting to modify the school environment. A current trend in school based violence prevention interventions is the use of multi-component interventions, or comprehensive interventions (Astor & Meyer, 2001; Leaf & Keys, 2005). These interventions include an individual component, focused on changing how the individual perceives and responds to a potentially violence situation, as well as an environmental component. As violent situations occur in a context, this article links the individual and the environmental components as it suggests aspects of the school environment that influence students' perceptions of school safety. However, interventions will need to allow for flexibility in the exact school environment modifications as differences were seen in student perceptions between the two schools.

The school environment is a valid source of school violence prevention. This article supports research showing that both the school social and physical environment influence urban students' perceptions of the likelihood of school violence. While more research is needed both to understand students' perceptions of the role of the school environment in violence prevention in all school contexts, this study supports an additional focus on student relationships with school security as well as the influence of the neighborhood on school violence. An additional important step will be to understand the value added to current school based individually-focused interventions, both in order to understand the connection between individual behaviors and context, as well as to effectively prioritize school violence prevention efforts and resources.

Acknowledgments

This work was supported by the Centers for Disease Control and Prevention [grant number 1R36CE001374-01].

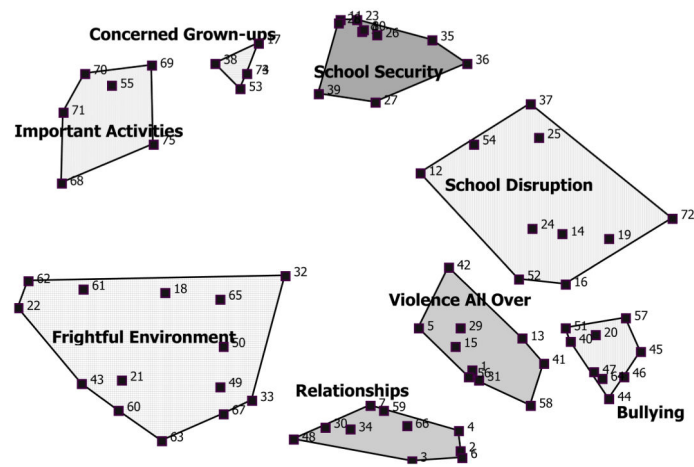
References

- Aldenderfer, MS.; Blashfield, RK. Cluster analysis Sage University paper series on quantitative applications in the social sciences. Newbury Park, CA: Sage; 1976.
- Astor RA, Meyer HA. The conceptualization of violence-prone school subcontexts: Is the sum of the parts greater than the whole. *Urban Education*. 2001; 36(3):374–399.
- Astor RA, Meyer HA, Behre WJ. Unowned places and times: Maps and interviews about violence in high schools. *American Educational Research Journal*. 1999; 36(1):3–42.
- Bandura, A. Social learning theory. 1st. New York: General Learning Press; 1977.
- Brown B. Understanding and assessing school police officers: A conceptual and methodological comment. *Journal of Criminal Justice*. 2006; 34:591–604.
- Burke JG, O'Campo P, Peak GL. Neighborhood influences and intimate partner violence: Does geographic setting matter? *Journal of Urban Health*. 2006; 83(2):182–194. [PubMed: 16736368]
- Centers for Disease Control and Prevention. [September 10, 2010] Youth violence: Using environmental design to prevent school violence. 2009. <http://www.cdc.gov/violenceprevention/youthviolence/cpted.html>
- Centers for Disease Control and Prevention. [July 12, 2010] Youth risk behavior surveillance study. 2008. <http://apps.nccd.cdc.gov/yrbss>

- Cozens P. Public health and the potential benefits of crime prevention through environmental design. *NSW Public Health Bulletin*. 2007; 18(11-12):232–237. [PubMed: 18093465]
- Culley MR, Conkling M, Emshoff J, Blakely C, Gorman D. Environmental and contextual influences on school violence and its prevention. *Journal of Primary Prevention*. 2006; 27:217–227. [PubMed: 16770725]
- Dinkes, R.; Kemp, J.; Baum, K. Indicators of school crime and safety: 2008. Washington, D.C: Government Printing Office; 2009. NCES 2009-002/NCJ 226343
- Everett Jones S, Fisher CJ, Greene BZ, Hertz MF, Pritzel J. Health and safe school environment part I: Results from the school health policies and programs study 2006. *The Journal of School Health*. 2007; 77(8):522–543. [PubMed: 17908106]
- Fine M, Freudenberg N, Payne Y, Perkins T, Smith K, Wazner K. “Anything can happen with police around”: Urban youth evaluate strategies of surveillance in public places. *Journal of Social Issues*. 2003; 59:141–158.
- Flannery DJ, Wester KL, Singer MI. Impact of exposure to violence in school on child and adolescent mental health and behavior. *Journal of Community Psychology*. 2004; 32(5):559–573.
- Ford JA. Nonmedical prescription drug use among adolescents: The influence of bonds to family and school. *Youth and Society*. 2009; 40(3):336–352.
- Henry S. School violence beyond columbine: A complex problem in need of an interdisciplinary analysis. *The American Behavioral Scientist*. 2009; 52:1246–1265.
- Hirschi, T. Causes of delinquency. 1st. Los Angeles: University of California Press; 1969.
- Janosz M, Archambault I, Pagani LS, Pascal S, Morin AJS, Bowen F. Are there detrimental effects of witnessing school violence in early adolescence? *Journal of Adolescent Health*. 2008; 43:600–608. [PubMed: 19027649]
- Kane, M.; Trochim, WMK. Concept mapping for planning and evaluation Applied social research methods series. Thousand Oaks, CA: Sage; 2007.
- Khourry-Kassabri M, Astor RA, Benbenishty R. Weapon carrying in Israeli schools: The contribution of individual and school factors. *Health Education and Behavior*. 2007; 34(3):453–470. [PubMed: 17200100]
- Kruskal, JB.; Wish, M. Multidimensional scaling Sage University paper series on quantitative applications in the social sciences. Newbury Park, CA: Sage; 1976.
- Leaf PJ, Keys SG. Collaborating for violence prevention: Training health professionals to work with schools. *American Journal of Preventive Medicine*. 2005; 29(5S2):279–287. [PubMed: 16376731]
- Lindstrom Johnson S. Improving the school environment to reduce school violence: A review of the literature. *Journal of School Health*. 2009; 10:451–465.
- Mateu-Gelabert P, Lune H. School violence: The bidirectional conflict flow between neighborhood and school. *City and Community*. 2001; 2(4):353–368.
- McNeely C, Falci C. School connectedness and the transition into and out of health-risk behavior among adolescents: A comparison of social belonging and teacher support. *Journal of School Health*. 2004; 74(7):284–292. [PubMed: 15493705]
- Neiman, S.; DeVoe, JF. Crime, violence, discipline, and safety in US public schools: Findings from the school survey on crime and safety: 2007-2008. Washington, D.C: Government Printing Office; 2009. NCES 2009-326
- Osher D, Vanacker R, Morrison GM, Gable R, Dwyer K, Quinn M. Warning signs of problems in schools. *Journal of School Violence*. 2004; 3:13–37.
- Reis AV, Voorhees CC, Gittelsohn J, Roche KM, Astone NM. Adolescents' perceptions of environmental influences on physical activity. *American Journal of Health Behavior*. 2008; 32(1): 26–39. [PubMed: 18021031]
- Reis J, Trockel M, Mulhall P. Individual and school predictors of middle school aggression. *Youth and Society*. 2007; 38(3):322–347.
- Sabol WJ, Coulton CJ, Dorbin JE. Building community capacity for violence prevention. *Journal of Interpersonal Violence*. 2004; 19(3):322–340. [PubMed: 15005995]
- Sampson RJ, Raudenbush SW, Earls F. Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*. 1997; 277(5328):918–924. [PubMed: 9252316]

- Sheehan K, Kim LE, Galvin JP. Urban children's perceptions of violence. *Archives of Pediatrics and Adolescent Medicine*. 2004; 158(1):74–77. [PubMed: 14706962]
- Sprott JB. The development of early delinquency: Can classroom and school climates make a difference. *Canadian Journal of Criminology and Criminal Justice*. 2004; 46(5):553–572.
- Time V, Payne BK. School violence prevention measures: School official's attitudes about various strategies. *Journal of Criminal Justice*. 2008; 36:301–306.
- United States Department of Education. Guide to exemplary and promising safe, disciplined, and drug-free schools. Washington, D.C: Government Printing Office; 2001.
- Van Dorn RA. Correlates of violent and nonviolent victimization in a sample of public high school students. *Violence and Victims*. 2004; 19(3):303–320. [PubMed: 15631283]
- Welsh WN. Individual and institutional predictors of school disorder. *Youth Violence and Juvenile Justice*. 2003; 1(4):346–368.
- Wilcox P, Augustine MC, Clayton RR. Physical environment and crime and misconduct in kentucky schools. *The Journal of Primary Prevention*. 2006; 27(3):293–313. [PubMed: 16596467]

GROUP A



GROUP B

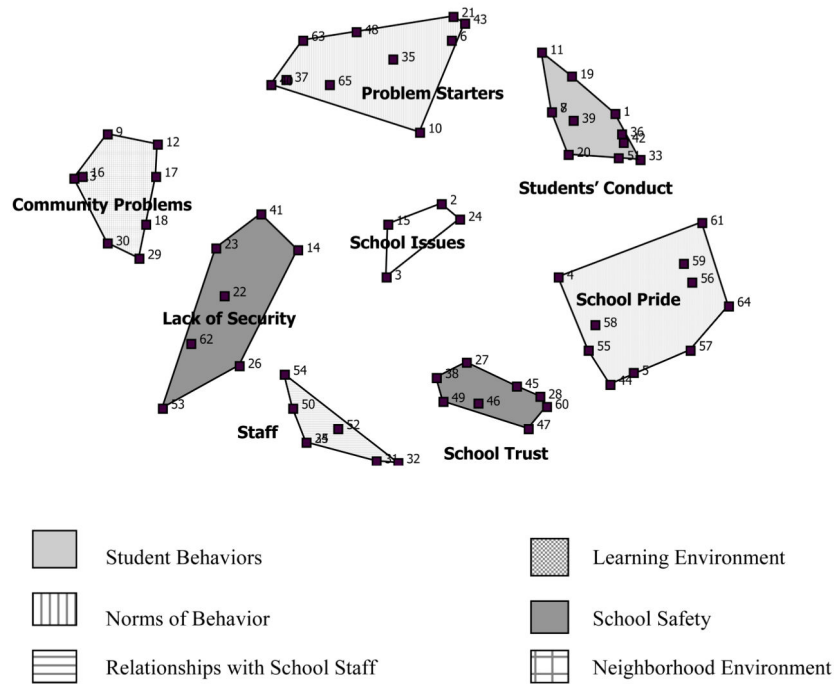


Figure 1. Cluster Map Comparisons Highlighted for Topic Similarity

Table 1
Participant Demographics

	Group A Participants(<i>n</i> =12)	Group B Participants(<i>n</i> =15)
Gender		
Male	50%	33%
Female	50%	67%
Grade		
9 th	8%	40%
10 th	22%	33%
11 th	42%	7%
12 th	17%	20%
Race		
African-American	100%	87%
Other	0%	13%
Grades		
Mostly A's	42%	27%
Mostly B's	50%	33%
Mostly C's	0%	7%
Mostly D's	8%	33%
Victim of School Violence		
Yes	25%	27%
No	75%	73%
Perpetrator of School Violence		
Yes	17%	33%
No	83%	67%

Note. For grade participants circled whether they received mostly A's, B's, C's, or D's. Victim of violence includes a positive response to one of three questions: missing school in past 30 days out of fear, having something stolen, or being threatened or injured with a weapon in the past year. Perpetrator of Violence indicates being involved in a fight in the past year.

Table 2
**Statements Generated Grouped by Study Group, Topic, and Cluster (Statement Number-
 Corresponds with Figure 1)**

Group A	Group B
Student Behaviors	
Cluster: Violence All Over Drama between students (1) Presence of gangs (5) Food fights (13) Students' disrespect towards each other (15) Gang graffiti (29) Forceful students (31) Bullying (41) Older students having younger students do their dirty work (42) Racism (56) Putdowns (58)	Cluster: Students' Conduct Students' disrespect towards each other (1) Students flashing gang signs (7) Students "posing" at being in a gang (8) Drama between students (11) Students not following school policies (19) Students sticking up for "their own" against students from other schools (20) Students' maturity (33) Students misbehaving in class (36) Drugs (39) Students not using inside voices (42) Students' disrespect towards teachers and staff (51)
Cluster: Relationships Rumors (2) Mixing up words (3) He said/She said (4) Gossip (6) Ex-boyfriends and ex-girlfriends being jealous of new relationship (7) Relationship play that goes to far (34) Phoniness (30) Popularity jealousy (48) Poor communication (59) Dishonesty (66)	
Norms of Behavior	
Cluster: Bullying Areas where students can get away with violence (20) Older kids thinking younger kids are vulnerable (40) Betting on fights (44) Crowds forming around fights (45) Crowds actively encouraging people to fight (46) Crowds able to form in hallways and cafeteria (47) Students misbehaving in class (51) Discrimination (57) Peer-pressure to act violently (64)	Cluster: Problem Starters Presence of gangs (6) White students picked to be beaten up /robbed (10) Rumors (21) Trash talk/Taunting /Name calling (35) Written/Drawn intimidation (37) Drinking (40) Clicks (43) Peer-pressure to be "bad" (48) Crowds able to form* (63) Relationship play that goes to far* (65)
Cluster: School Disruption Principal disciplining students who are in fights (12) Students' disrespect towards teachers and staff (14) Teachers' disrespect towards students (16) Lack of supervision in certain places (19) Students not following school policies (24) Teachers who follow the rules differently (25) Administrators that will act on small acts of violence (37) Students not caring about other students' safety (52) Different consequences for violence at school versus out of school (54) Deterioration of school facility* (72)	
Relationships with School Staff	
Cluster: Concerned Grown-ups Teachers making sure students are safe (17) Teacher who advise students about appropriate behavior (38) An involved Principal (53) School rules are clear* (74) School rules are fair* (73)	Cluster: Staff Teachers not out in hallway (25) Teachers leaving- especially those connected to (31) Teachers caring about watching students grow and graduate (32) Teachers not caring about students' inappropriate behavior (34) Too much connection to teachers (50) Teachers' disrespect towards students (52)

Group A	Group B
	Teachers inappropriately looking at students (54)
Learning Environment	
Cluster: Important Activities Programs that teach students how to better handle potentially violent situations (55) Know all students* (68) Students and staff focused on student learning* (69) After-school activities and sports available* (70) Students' achievements highlighted around school* (71) Student participation in decision-making* (75)	Cluster: School Pride School not having a reputation- a new school (4) School pride (5) School police that care about students (44) Longer school-day (55) Know all students* (56) Students and staff focused on student learning* (57) After-school activities and sports available* (58) Students achievements highlighted around school* (59) Student participation in decision-making* (61) Programs that teach students how to better handle potentially violent situations* (64)
School Safety	
Cluster: School Security Presence of school police (8) School police policies (9) School police that care about students (10) School police that make sure students go to class (11) School police that are aware (23) Teachers who strictly follow the rules (26) Enforcement of school policies (27) Metal detectors (28) Security cameras (35) Staff monitoring the security cameras (36) Teachers who care about students (39)	Cluster: School Trust Discrimination by school police (27) School police who are unnecessarily harsh (28) Educational posters (38) School police not actively involved in school (45) Lack of trust of school police (46) School rules too harsh (47) An involved Principal (49) School rules are clear* (60) Cluster: Lack of Security Stores near school not allowing students in (14) Deterioration of school facility (22) Lack of supervision in certain places (23) Presence of school police (26) Driving (41) Teachers judging students (53) Security cameras* (62)
Neighborhood Environment	
Cluster: Frightful Environment Students rapping (18) A culture of no "snitching" (21) Students not feeling safe enough to "snitch" (22) Family defending family (32) Inappropriate sexual touching (33) Drugs (43) Homophobia (49) Homosexuals having to prove their manliness (50) Teen pregnancy (60) Students' maturity (61) A wide diversity of students (62) Girls acting "bougie" (63) Bias (65) Inappropriate dress by females (67)	Cluster: Community Problems Racism in neighborhood (9) Members of the community threatening/vandalizing the school (12) Unwelcome by the neighborhood (13) Fear for safety in the neighborhood (16) No respect for the school environment (17) Garbage (18) Taking public transportation to school (29) Bus-drivers (30)
Unmatched	
	Cluster: School Issues Multiple schools in the same building (2) People judging your school by the schools in your building (3) Jealousy from other schools (15) Areas where students can get away with violence (24)

Note: Asterisk indicates items that were added by the researcher. Number beside statement corresponds to the point on the concept map.